Listing of Claims:

1. (Currently Amended) An image acquiring device for performing time lapse imaging, comprising:

an imaging portion which performs imaging of a subject;

a time lapse imaging condition setting portion which sets a time lapse imaging condition including at least an exposure time and an imaging interval, prior to the imaging of the subject by the imaging portion;

a determining portion which determines a contradiction of the time lapse imaging condition set by the time lapse imaging condition setting portion according to a predetermined criterion; and

a presenting portion which presents at least information relating to the contradiction of the time lapse imaging condition based on a determined result determined by the determining portion.

2. (Original) The image acquiring device for performing time lapse imaging according to claim 1, wherein the determining portion determines the contradiction of the time lapse imaging condition by using a relation between the exposure time and the imaging interval as the predetermined criterion.

3. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 2, further comprising:

an avoiding condition generating portion which generates a plurality of time lapse imaging conditions for avoiding the contradiction of the time lapse imaging condition based on the determined result determined by the determining portion, and causes ~~to present~~ information relating to the plurality of time lapse imaging conditions to be presented by the presenting portion;

a selecting portion which selects one of the plurality of time lapse imaging ~~condition~~ conditions from ~~within~~ the information relating to the plurality of time lapse imaging conditions presented by the presenting portion; and

an instructing portion which instructs the imaging portion to execute time lapse imaging based on the time lapse imaging condition selected by the selecting portion.

4. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 3, further comprising:

an exposure time setting portion which sets the exposure time set by the time lapse imaging condition setting portion to the imaging portion; and

a gain setting portion which enables setting of gain of an output signal from the imaging portion,

wherein, when the determining portion determines as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, the plurality of time lapse imaging conditions generated by the avoiding condition generating portion ~~changes a set~~ include a time lapse imaging condition according to which the instructing portion instructs the image acquiring device to change a value of the exposure time set by the exposure time setting portion to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a value of the gain set by the gain setting portion based on a value determined from a ratio of the exposure time after the change and the imaging interval.

5. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 3, further comprising:

an exposure time setting portion which sets the exposure time set by the time lapse imaging condition setting portion to the imaging portion; and

a brightness correcting portion which enables correction of brightness of an image by correcting an output signal from the imaging portion,

wherein, when the determining portion determines as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, the plurality of time lapse imaging conditions generated by the avoiding condition generating portion ~~changes a set~~ include a time lapse imaging condition according to which the instructing portion instructs the image acquiring device to change a value of the exposure time set by the exposure time setting portion to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a value for correcting the brightness of the image by the brightness correcting portion based on a value determined from a ratio of the exposure time after the change and the imaging interval.

6. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 3, further comprising:

an exposure time setting portion which sets the exposure time set by the time lapse imaging condition setting portion to the imaging portion;

a gain setting portion which enables setting of gain of an output signal from the imaging portion; and

a brightness correcting portion which enables correction of brightness of an image by correcting the output signal from the imaging portion,

wherein, when the determining portion determines as the contradiction ~~of the time lapse imaging conditions in which~~ that the exposure time is longer than the imaging interval, the plurality of time lapse imaging conditions generated by the avoiding condition generating portion ~~changes a set~~ include a time lapse imaging condition according to which the instructing portion instructs the image acquiring device to change a value of the exposure time set by the exposure time setting portion to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a value of the gain set by the gain setting portion to a value determined from a ratio of the exposure time after the change and the imaging interval, and when ~~a set~~ the value of the gain ~~value~~ determined from the ratio exceeds a maximum gain value, ~~sets~~ to set the maximum gain value as the value of the gain set by the gain setting portion and ~~sets~~ to set a value for correcting the brightness of the image by the brightness correction part based on a value determined from a ratio of the value of the gain determined from the ratio and the maximum gain value.

7. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 1, wherein the imaging portion ~~includes~~ comprises an imaging portion of a microscopic image acquiring device.

8. (Currently Amended) ~~An image acquiring~~ A method for ~~performing time lapse imaging~~ an image acquiring device, which includes an imaging portion which performs imaging of a subject and a presenting portion, the method comprising:

~~preparing an imaging portion which performs imaging of a subject;~~

setting a time lapse imaging condition including at least an exposure time and an imaging interval, prior to the imaging of the subject by the imaging portion;

determining a contradiction of the set time lapse imaging condition ~~set by including at least the exposure time and the imaging interval~~ according to a predetermined criterion; and

presenting, via the presenting section, at least information relating to the contradiction of the time lapse imaging condition based on a ~~determined~~ result of the determination of the contradiction ~~of the time lapse imaging condition, by a presenting portion~~.

9. (Currently Amended) The ~~image acquiring~~ method ~~for performing time lapse imaging~~ according to claim 8, wherein the predetermined criterion according to which ~~determining determines~~ the contradiction of the time lapse imaging condition ~~by using~~ is determined is a relation between the exposure time and the imaging interval ~~as the predetermined criterion~~.

10. (Currently Amended) The ~~image acquiring~~ method ~~for performing time lapse imaging~~ according to claim 9, further comprising:

generating a plurality of time lapse imaging conditions for avoiding the contradiction of the time lapse imaging condition based on the ~~determined~~ result of the determination of the contradiction of the time lapse imaging condition, and presenting information relating to the plurality of time lapse imaging conditions by the presenting portion;

selecting one of the plurality of time lapse imaging ~~condition~~ conditions from ~~within~~ the information relating to the plurality of time lapse imaging conditions presented by the presenting portion; and

instructing the imaging portion to execute time lapse imaging based on the selected time lapse imaging condition ~~selected from within the plurality of time lapse imaging conditions~~.

11. (Currently Amended) The ~~image acquiring~~ method ~~for performing time lapse imaging~~ according to claim 10, ~~further comprising: preparing an exposure time setting portion which sets the exposure time by the setting of the time lapse imaging condition to the imaging portion; and preparing a gain setting portion which enables setting of gain of an output signal from the imaging portion,~~ wherein, when ~~the determining determines~~ it is determined as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, ~~the generating~~ the generated plurality of time lapse imaging conditions include a time lapse imaging condition according to which the image acquiring device is instructed to change ~~changes~~ a ~~set~~ value of the exposure time ~~by the exposure time setting portion~~ to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets a value of the~~ to set a gain ~~set by the gain setting portion~~ of an output signal from the imaging portion based on ~~the~~ a value ~~of the gain~~ determined from a ratio of the changed exposure time ~~after change~~ and the imaging interval.

12. (Currently Amended) The ~~image acquiring~~ method ~~for performing time lapse imaging~~ according to claim 10, ~~further comprising: preparing an exposure time setting portion which sets~~

~~the exposure time by the setting of the time lapse imaging condition to the imaging portion; and preparing a brightness correcting portion which enables correction of brightness of an image by an output signal from the imaging portion,~~ wherein, when ~~the determining~~ it is determined that as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, ~~the generating~~ the generated plurality of time lapse imaging conditions include a time lapse imaging condition according to which the image acquiring device is instructed to change ~~changes~~ a ~~set~~ value of the exposure time ~~by the exposure time setting portion~~ to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a value for correcting ~~the~~ brightness of the image, by ~~the brightness~~ correcting an output signal from the imaging portion, based on a value determined from a ratio of the changed exposure time ~~after change~~ and the imaging interval.

13. (Currently Amended) The ~~image acquiring~~ method ~~for performing time lapse imaging~~ according to claim 10, ~~further comprising: preparing an exposure time setting portion which sets the exposure time by the setting of the time lapse imaging condition to the imaging portion; preparing a gain setting portion which enables setting of gain of an output signal from the imaging portion; and preparing a brightness correcting~~

~~portion which enables correction of brightness of an image by the output signal from the imaging portion,~~ wherein, when ~~the determining determines~~ it is determined as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, ~~the generating~~ the generated plurality of time lapse imaging conditions include a time lapse imaging condition according to which the image acquiring device is instructed to change ~~changes~~ a ~~set~~ value of the exposure time ~~by the exposure time setting portion~~ to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a ~~value of the~~ gain ~~set by the gain setting portion~~ of an output signal from the imaging portion to a value determined from a ratio of the changed exposure time ~~after change~~ and the imaging interval, ~~and~~ wherein when ~~a set~~ the value of the gain ~~value~~ determined from the ratio exceeds a maximum gain value, ~~sets~~ the maximum gain value is set as the gain value ~~of the gain set by the gain setting portion~~ and ~~sets~~ a value for correcting the brightness of the image by ~~the brightness~~ correcting the output signal from the imaging portion is set ~~portion~~ based on a value determined from a ratio of the value of the gain determined from the ratio and the maximum gain value.

14. (Currently Amended) The ~~image acquiring~~ method ~~for performing time lapse imaging~~ according to claim 8, wherein the

imaging portion ~~includes~~ comprises an imaging portion of a microscopic image acquiring device for fluorescence photography.

15. (Currently Amended) An image acquiring device for performing time lapse imaging, comprising:

imaging means for performing imaging of a subject;

time lapse imaging condition setting means for setting a time lapse imaging condition including at least an exposure time and an imaging interval, prior to the imaging of the subject by the imaging means;

determining means for determining a contradiction of the time lapse imaging condition set by the time lapse imaging condition setting means according to a predetermined criterion; and

presenting means for presenting at least information relating to the contradiction of the time lapse imaging condition based on a determined result determined by the determining means.

16. (Original) The image acquiring device for performing time lapse imaging according to claim 15, wherein the determining means determines the contradiction of the time lapse imaging condition by using a relation between the exposure time and the imaging interval as the predetermined criterion.

17. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 16, further comprising:

avoiding condition generating means for generating a plurality of time lapse imaging conditions for avoiding the contradiction of the time lapse imaging condition based on the determined result determined by the determining means, and causing ~~to present~~ information relating to the plurality of time lapse imaging conditions to be presented by the presenting means;

selecting means for selecting one of the plurality of time lapse imaging ~~condition~~ conditions from ~~within~~ the information relating to the plurality of time lapse imaging conditions presented by the presenting means; and

instructing means for instructing the imaging means to execute time lapse imaging based on the time lapse imaging condition selected by the selecting means.

18. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 17, further comprising:

exposure time setting means for setting the exposure time set by the time lapse imaging condition setting means to the imaging means; and

gain setting means for enabling setting of gain of an output signal from the imaging means,

wherein, when the determining means determines as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, the plurality of time lapse imaging conditions generated by the avoiding condition generating means ~~changes a set~~ include a time lapse imaging condition according to which the instructing means instructs the image acquiring device to change a value of the exposure time set by the exposure time setting means to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a value of the gain set by the gain setting means based on the value determined from a ratio of the exposure time after the change and the imaging interval.

19. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 17, further comprising:

exposure time setting means for setting the exposure time set by the time lapse imaging condition setting means to the imaging means; and

brightness correcting means for enabling correction of brightness of an image by correcting an output signal from the imaging means,

wherein, when the determining means determines as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, the plurality of time lapse imaging conditions generated by the avoiding condition generating means ~~changes a set~~ include a time lapse imaging condition according to which the instructing means instructs the image acquiring device to change a value of the exposure time set by the exposure time setting means to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a value for correcting the brightness of the image by the brightness correcting means based on a value determined from a ratio of the exposure time after the change and the imaging interval.

20. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 17, further comprising:

exposure time setting means for setting the exposure time set by the time lapse imaging condition setting means to the imaging means;

gain setting means for enabling setting of gain of an output signal from the imaging means; and

brightness correcting means for enabling correction of brightness of the image by correcting the output signal from the imaging means,

wherein, when the determining means determines as the contradiction ~~of the time lapse imaging condition in which~~ that the exposure time is longer than the imaging interval, the plurality of time lapse imaging conditions generated by the avoiding condition generating means ~~changes a set~~ include a time lapse imaging condition according to which the instructing means instructs the image acquiring device to change a value of the exposure time set by the exposure time setting means to ~~an exposure time~~ be shorter than the imaging interval, and ~~sets~~ to set a value of the gain set by the gain setting means to the value determined from a ratio of the exposure time after the change and the imaging interval, and when ~~a set~~ the value of the gain ~~value~~ determined from the ratio exceeds a maximum gain value, ~~sets~~ to set the maximum gain value as the value of the gain set by the gain setting means and sets a value for correcting the brightness of the image by the brightness correction means based on the value determined from a ratio of the value of the gain determined from the ratio and the maximum gain value.

21. (Currently Amended) The image acquiring device for performing time lapse imaging according to claim 15, wherein the imaging means ~~includes~~ comprises imaging means of a microscopic image acquiring device.

22. (New) An image acquiring device for performing time lapse imaging, comprising:

an imaging portion which performs imaging of a subject;

a time lapse imaging condition setting portion which sets a time lapse imaging condition including at least an exposure time and an imaging interval, prior to the imaging of the subject by the imaging portion;

a determining portion which determines a contradiction of the time lapse imaging condition set by the time lapse imaging condition setting portion according to a predetermined criterion; and

a presenting portion which presents at least information relating to the contradiction of the time lapse imaging condition based on a determined result determined by the determining portion;

an avoiding condition generating portion which generates a plurality of time lapse imaging conditions for avoiding the contradiction of the time lapse imaging condition based on the determined result determined by the determining portion, and

causes information relating to the plurality of time lapse imaging conditions to be presented by the presenting portion;

a selecting portion which selects one of the plurality of time lapse imaging conditions from the information relating to the plurality of time lapse imaging conditions presented by the presenting portion;

an instructing portion which instructs the imaging portion to execute time lapse imaging based on the time lapse imaging condition selected by the selecting portion;

an exposure time setting portion which sets the exposure time set by the time lapse imaging condition setting portion to the imaging portion;

a gain setting portion which enables setting of gain of an output signal from the imaging portion; and

a brightness correcting portion which enables correction of brightness of an image by correcting the output signal from the imaging portion;

wherein the determining portion determines the contradiction of the time lapse imaging condition by using a relation between the exposure time and the imaging interval as the predetermined criterion;

wherein, when the determining portion determines as the contradiction that the exposure time is longer than the imaging interval, the avoiding condition generating portion changes a set

value of the exposure time set by the exposure time setting portion to be shorter than the imaging interval, and sets a value of the gain set by the gain setting portion to a value determined from a ratio of the exposure time after the change and the imaging interval, and when a set gain value exceeds a maximum gain value, sets the maximum gain value as the value of the gain set by the gain setting portion and sets a value for correcting the brightness of the image by the brightness correction part based on a value determined from a ratio of the value of the gain determined from the ratio and the maximum gain value.

23. (New) The image acquiring device for performing time lapse imaging according to claim 22, wherein the imaging portion comprises an imaging portion of a microscopic image acquiring device.

24. (New) A method for an image acquiring device, which includes an imaging portion which performs imaging of a subject and a presenting portion, the method comprising:

setting a time lapse imaging condition including at least an exposure time and an imaging interval, prior to the imaging of the subject by the imaging portion;

determining a contradiction of the set time lapse imaging condition according to a predetermined criterion;

presenting, via the presenting section, at least information relating to the contradiction of the time lapse imaging condition based on a result of the determination of the contradiction;

generating a plurality of time lapse imaging conditions for avoiding the contradiction of the time lapse imaging condition based on the result of the determination of the contradiction of the time lapse imaging condition, and presenting information relating to the plurality of time lapse imaging conditions by the presenting portion;

selecting one of the plurality of time lapse imaging conditions from the information relating to the plurality of time lapse imaging conditions presented by the presenting portion; and

instructing the imaging portion to execute time lapse imaging based on the selected time lapse imaging condition;

wherein the predetermined criterion according to which the contradiction of the time lapse imaging condition is determined is a relation between the exposure time and the imaging interval;

wherein the image acquiring device further comprises an exposure time setting portion which sets the exposure time, which is set by the setting of the time lapse imaging condition, to the imaging portion, a gain setting portion which enables setting of gain of an output signal from the imaging portion, and a brightness correcting portion which enables correction of

brightness of an image by correcting the output signal from the imaging portion; and

wherein, when the exposure time is determined to be longer than the imaging interval as the contradiction, the generating the plurality of time lapse imaging conditions changes a value of the exposure time set by the exposure time setting portion to be shorter than the imaging interval, and sets a value of the gain set by the gain setting portion to a value determined from a ratio of the exposure time after the change and the imaging interval, and when a set gain value exceeds a maximum gain value, sets the maximum gain value as the gain value and sets a value for correcting the brightness of the image by the brightness correcting portion based on a value determined from a ratio of the value of the gain determined from the ratio and the maximum gain value.

25. (New) The method according to claim 24, wherein the imaging portion comprises an imaging portion of a microscopic image acquiring device for fluorescence photography.

26. (New) An image acquiring device for performing time lapse imaging, comprising:

imaging means for performing imaging of a subject;

time lapse imaging condition setting means for setting a time lapse imaging condition including at least an exposure time and an imaging interval, prior to the imaging of the subject by the imaging means;

determining means for determining a contradiction of the time lapse imaging condition set by the time lapse imaging condition setting means according to a predetermined criterion;

presenting means for presenting at least information relating to the contradiction of the time lapse imaging condition based on a determined result determined by the determining means;

avoiding condition generating means for generating a plurality of time lapse imaging conditions for avoiding the contradiction of the time lapse imaging condition based on the determined result determined by the determining means, and causing information relating to the plurality of time lapse imaging conditions to be presented by the presenting means;

selecting means for selecting one of the plurality of time lapse imaging conditions from the information relating to the plurality of time lapse imaging conditions presented by the presenting means;

instructing means for instructing the imaging means to execute time lapse imaging based on the time lapse imaging condition selected by the selecting means;

exposure time setting means for setting the exposure time set by the time lapse imaging condition setting means to the imaging means;

gain setting means for enabling setting of gain of an output signal from the imaging means; and

brightness correcting means for enabling correction of brightness of the image by correcting the output signal from the imaging means;

wherein the determining means determines the contradiction of the time lapse imaging condition by using a relation between the exposure time and the imaging interval as the predetermined criterion; and

wherein, when the determining means determines the contradiction of the time lapse imaging condition in which the exposure time is longer than the imaging interval, the avoiding condition generating means changes a set value of the exposure time set by the exposure time setting means to be shorter than the imaging interval, and sets a value of the gain set by the gain setting means to the value determined from a ratio of the exposure time after the change and the imaging interval, and when a set gain value exceeds a maximum gain value, sets the maximum gain value as the value of the gain set by the gain setting means and sets a value for correcting the brightness of the image by the brightness correction means based on the value determined

from a ratio of the value of the gain determined from the ratio and the maximum gain value.

27. (New) The image acquiring device for performing time lapse imaging according to claim 26, wherein the imaging means comprises imaging means of a microscopic image acquiring device.

28. (New) An apparatus for microscopic time lapse imaging, comprising:

a camera unit, including an imager, attached to a microscope;

a presenting portion for presenting information; and

an operation controller configured to control operation of the camera unit based on conditions, including at least an exposure time and an interval time, inputted by a user,

wherein the controller judges a relationship between the exposure time and the interval time, and controls the presenting portion to present an error dialog when the relationship does not satisfy a predetermined condition; and

wherein the error dialog includes an error avoiding condition which includes changing a gain in the imager.